

Washington Aqueduct

U.S. ARMY Corps of Engineers

Annual Report of Water Analysis 2017

Prepared by:

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Approved by the Chief, Washington Aqueduct



Potomac River Raw Water Supply

				Miscella	aneous Ph	ysical Pa	rameters							In	organic Id	ns						Microor	ganisms		
	рН	ALKALINITY	CONDUCTIVITY	DISSOLVED SOLIDS	SUSPENDED SOLIDS	TOTAL SOLIDS	TEMPERATURE	TOTAL HARDNESS	TOTAL ORGANIC CARBON	TURBIDITY	TOTAL AMMONIA - N	BROMIDE	CHLORIDE	FLUORIDE	NITRATE - N	NITRITE - N	ORTHOPHOSPHATE - PO4	PERCHLORATE	SULFATE	TOTAL COLIFORM	<u>E. COLI</u>	<u>GIARDIA</u> Great Falls Intake	CRYPTOSPORIDIUM Great Falls Intake	<u>GIARDIA</u> Little Falls Intake	CRYPTOSPORIDIUM Little Falls Intake
		ppm	uS/cm	ppm	ppm	ppm	°F	ppm	ppm	NTU	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	MPN/100mL	MPN/100mL	cysts/L	Oocysts/L	cysts/L	Oocysts/L
Jan	7.7	65	335	171	4	175	45	119	3.0	14	ND	0.07	37	ND	1.6	ND	ND	0.4	32	9946	223	0.84	0.09	0.88	0.10
Feb	7.7	68	296	197	22	219	48	110	2.4	8	ND	0.05	29	ND	1.8	ND	ND	0.3	32	2234	20	0.56	0.19	0.37	ND
Mar	8.0	69	322	194	4	198	53	113	2.5	6	ND	ND	33	ND	1.3	ND	ND	0.3	27	3952	116	0.29	ND	0.57	ND
Apr	7.6	66	271	142	29	171	61	100	3.4	15	ND	ND	26	ND	1.3	ND	ND	0.3	23	1733	52	ND	ND	0.67	ND
May	7.7	65	242	134	41	175	64	97	3.6	16	ND	ND	18	ND	1.2	ND	ND	ND	22	7620	123	0.14	0.28	1.02	0.09
Jun	8.0	90	318	182	5	187	76	129	2.6	6	ND	ND	26	ND	1.3	ND	ND	0.3	31	21172	1934	ND	ND	0.09	ND
Jul	7.9	99	364	224	ND	224	82	142	3.5	5	ND	ND	29	0.12	1.4	ND	ND	0.4	35	8199	26	ND	ND	0.09	ND
Aug	8.0	87	321	171	9	180	78	121	3.4	6	ND	0.04	28	0.11	1.2	ND	ND	0.3	31	13158	56	0.10	ND	ND	ND
Sep	8.0	103	397	246	4	250	73	151	2.8	4	ND	0.05	36	0.13	1.0	ND	ND	0.6	44	8946	40	ND	ND	0.19	ND
Oct	8.0	119	444	258	1	259	67	169	3.2	4	ND	0.06	40	0.14	0.9	ND	ND	0.4	53	2967	87	ND	ND	0.20	0.20
Nov	7.8	90	341	170	2	172	49	132	3.4	6	ND	0.06	29	0.10	1.5	ND	ND	0.4	37	3026	230	0.10	ND	0.10	ND
Dec	8.1	112	409	234	1	235	41	155	2.4	4	ND	0.06	34	0.12	1.5	ND	ND	0.5	41	3012	5	0.20	ND	ND	ND

													Metals												
	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	САБМІПМ	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	LITHIUM	MAGNESIUM	MANGANESE	MOLYBDENUM	NICKEL	SELENIUM	SILVER	SODIUM	STRONTIUM	THALLIUM	THORIUM	URANIUM	ZINC
	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb
Jan	331	ND	ND	35	ND	ND	36	ND	ND	1.9	95	ND	2.4	7	29	0.7	1.2	ND	ND	17	188	ND	ND	0.2	3.1
Feb	268	ND	ND	34	ND	ND	35	ND	0.3	1.7	229	0.3	1.9	6	42	0.5	1.5	ND	ND	16	120	ND	ND	ND	3.2
Mar	394	ND	ND	36	ND	ND	36	ND	ND	1.6	124	ND	2.2	6	36	0.6	1.2	ND	ND	20	163	ND	ND	0.2	3.4
Apr	559	0.2	ND	41	ND	ND	33	ND	0.8	2.4	847	1.1	2.2	5	92	0.4	2.3	ND	ND	15	105	ND	ND	ND	5.6
May	438	ND	ND	42	ND	ND	31	ND	0.7	4.9	767	1.0	2.5	5	84	0.4	1.9	ND	ND	11	122	ND	ND	ND	4.8
Jun	227	ND	ND	41	ND	ND	39	ND	0.3	3.5	339	0.6	2.1	8	41	0.5	1.5	ND	ND	14	142	ND	ND	0.2	2.8
Jul	95	ND	ND	45	ND	ND	42	ND	ND	3.7	79	ND	2.4	9	28	0.8	1.3	ND	ND	17	188	ND	ND	0.2	1.2
Aug	679	ND	0.4	50	ND	ND	37	ND	0.8	2.6	1015	1.3	2.6	7	89	0.5	2.4	ND	ND	15	126	ND	0.6	ND	5.2
Sep	109	ND	0.3	43	ND	ND	45	ND	ND	4.8	154	0.2	3.5	10	18	1.0	1.4	ND	ND	20	207	ND	ND	0.3	1.4
Oct	72	ND	0.3	48	ND	ND	49	ND	ND	2.3	50	ND	4.1	11	11	1.4	1.4	ND	ND	22	261	ND	0.5	0.4	1.3
Nov	735	ND	ND	56	ND	ND	41	ND	1.0	3.6	1270	1.6	3.8	7	116	0.5	2.7	ND	ND	16	172	ND	0.7	0.3	7.5
Dec	160	ND	0.3	38	ND	ND	48	ND	ND	10	175	0.6	2.5	9	39	0.7	1.1	ND	ND	19	194	ND	ND	0.2	3.0
nnm = Darte E	M:III		nnh = Darte	Day Dillian	•	ND = Not Do		•	MDN/400I	- Mast Dual	aabla Numba	400!!	111 14	•	NITH - Nach	olomotric Tu					roSiomone n		_		Dogo 1 of

ppm = Parts Per Million ppb = Parts Per Billion ND = Not Detected MPN/100mL = Most Probable Number per 100 milliLiters NTU = Nephelometric Turbidity Units µS/cm = microSiemens per centimeter Page 1 of 7



				Ino	ganic	Ions																	Ме	tals													
	TOTAL AMMONIA - N	BROMIDE	CHLORIDE	FLUORIDE	NITRATE - N	NITRITE - N	ORTHOPHOSPHATE - PO4	PERCHLORATE	SULFATE	ALUMINUM	ANTIMONY	ARSENIC	BARIUM	BERYLLIUM	САБМІИМ	CALCIUM	CHROMIUM	COBALT	COPPER	IRON	LEAD	LITHIUM	MAGNESIUM	MANGANESE	MERCURY	MOLYBDENUM	NICKEL	POTASSIUM	SELENIUM	SILVER	SODIUM	STRONTIUM	THALLIUM	THORIUM	URANIUM	VANADIUM	ZINC
EPA MCL*				4	10	1					6	10	2000	4	5		100								2				50				2		30		
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb
la-						1			Water		NB	NB	20	NP	ND	40	NP	ND	4.0	ND	ND		-	0.0	ND	0.7	4.0	2.5	ND	ND	24	400	ND	ND	ND	ND	4.5
Jan Esh	0.7	ND ND	38	0.7	1.7	ND ND	2.3	0.3	52 45	24 15	ND ND	ND ND	33	ND ND	ND ND	40 36	ND ND	ND ND	0.8	ND ND	ND ND	1.9	7	0.8	ND ND	0.7	0.9	2.5	ND ND	ND ND	21	190 120	ND ND	ND ND	ND ND	ND ND	1.5 0.7
Feb Mar	0.7	ND	39	0.7	1.7	ND	2.4	0.3	41	23	ND	ND	35	ND	ND	37	ND	ND	1.2	ND	ND	2.1	7	0.5	ND	0.4	1.1		ND	ND	26	165	ND	ND	ND	ND	1.3
Apr	0.5	ND	30	0.7	1.3	ND	2.3	0.3	39	19	ND	ND	31	ND	ND	34	ND	ND	1.0	ND	ND	1.9	5	0.5	ND	0.4	1.0	2.2	ND	ND	20	114	ND	ND	ND	ND	0.6
May	0.7	ND	21	0.7	1.1	ND	2.3	0.2	41	21	ND	0.2	35	ND	ND	34	ND	ND	0.8	ND	ND	2.1	5	0.5	ND	0.4	0.9		ND	ND	15	138	ND	ND	ND	ND	0.6
Jun	0.7	ND	29	0.7	1.1	ND	2.4	0.3	44	22	ND	ND	36	ND	ND	42	ND	ND	0.9	ND	ND	1.8	7	0.2	ND	0.4	0.9		ND	ND	20	134	ND	ND	ND	ND	ND
Jul	0.7	ND	35	0.7	1.3	ND	2.4	0.5	51	45	ND	0.3	41	ND	ND	46	ND	ND	1.0	ND	ND	2.3	9	0.8	ND	0.7	0.9	3.0	ND	ND	21	170	ND	ND	ND	ND	ND
Aug	0.8	ND	32	0.8	1.2	ND	2.4	0.3	47	30	ND	0.2	37	ND	ND	41	ND	ND	1.2	ND	ND	2.1	7	1.0	ND	0.7	1.0		ND	ND	21	143	ND	ND	ND	ND	ND
Sep	0.8	ND	41	0.8	1.0	ND	2.3	0.5	54	60	ND	0.4	34	ND	ND	45	ND	ND	0.9	ND	ND	2.5	8	0.6	ND	0.9	0.9		ND	ND	25	178	ND	ND	ND	ND	ND
Oct	0.8	ND	43	0.7	0.8	ND	2.3	0.4	66	80	ND	0.4	42	ND	ND	50	ND	ND	1.2	ND	ND	2.5	11	1.0	ND	1.1	1.2	4.4	ND	ND	27	254	ND	ND	ND	ND	ND
Nov	0.7	ND	34	0.7	1.5	ND	2.4	0.6	52	39	ND	0.2	39	ND	ND	44	ND	ND	1.2	ND	ND	2.5	8	0.6	ND	1.0	1.3		ND	ND	23	225	ND	ND	ND	ND	0.8
Dec	8.0	ND	37	0.6	1.5	ND	2.3	0.3	55	29	ND	0.3	34	ND	ND	48	ND	ND	0.9	ND	ND	1.9	9	0.6	ND	0.7	8.0		ND	ND	22	199	ND	ND	ND	ND	1.0
	McMi	illan V	Vater	Treat	ment	Plant	Finis	hed V	Vater																												
Jan	0.8	ND	40	0.6	1.6	ND	2.5	0.3	53	21	ND	ND	34	ND	ND	35	ND	ND	4.2	ND	ND	2.5	7	0.3	ND	0.7	1.1	2.6	ND	ND	24	193	ND	ND	ND	ND	27
Feb	0.8	ND	31	0.7	1.6	ND	2.4	0.4	49	22	ND	ND	32	ND	ND	29	ND	ND	4.9	ND	ND	2.2	7	1.3	ND	0.7	1.2		ND	ND	20	133	ND	ND	ND	ND	1.5
Mar	0.6	ND	39	0.6	1.3	ND	2.4	0.3	44	34	ND	ND	32	ND	ND	30	ND	ND	2.8	ND	ND	2.0	7	0.2	ND	0.5	0.9		ND	ND	23	154	ND	ND	ND	ND	1.1
Apr	0.6	ND	32	0.6	1.3	ND	2.3	0.3	40	31	ND	ND	32	ND	ND	26	ND	ND	3.1	ND	ND	1.7	5	0.3	ND	0.4	0.8	2.3	ND	ND	21	128	ND	ND	ND	ND	1.1
Мау	0.7	ND	25	0.7	1.0	ND	2.3	0.3	40	37	ND	ND	34	ND	ND	27	ND	ND	6.1	ND	ND	1.8	5	ND	ND	0.5	8.0		ND	ND	18	137	ND	ND	ND	ND	ND
Jun	0.7	ND	29	8.0	1.0	ND	2.3	0.3	45	39	ND	ND	35	ND	ND	32	ND	ND	8.3	ND	ND	1.8	7	ND	ND	0.4	0.7		ND	ND	19	133	ND	ND	ND	ND	ND
Jul	8.0	ND	35	0.7	1.2	ND	2.3	0.4	52	53	ND	ND	44	ND	ND	39	ND	ND	7.9	ND	ND	2.4	9	0.5	ND	0.7	0.7	3.5	ND	ND	23	191	ND	ND	ND	ND	ND
Aug	8.0	ND	33	0.7	1.2	ND	2.4	0.3		44	ND	ND	38	ND	ND	34	ND	ND	6.1	ND	ND	1.9	7	0.6	ND	8.0	0.7		ND	ND	22	177	ND	ND	ND	ND	ND
Sep	0.7	ND	42	0.6	1.0	ND	2.4	0.5	53	59	ND	0.3	37	ND	ND	40	ND	ND	5.9	ND	ND	1.5	9	0.3	ND	0.9	0.6		ND	ND	26	199	ND	ND	ND	ND	ND
Oct	0.7	ND	44	8.0	8.0	ND	2.5	0.4		79	ND	0.2	42	ND	ND	45	ND	ND	6.5	ND	ND	2.1	11	0.4	ND	1.0	1.0	4.4	ND	ND	28	238	ND	ND	ND	ND	ND
Nov -	0.7	ND	44	0.7	8.0	ND	2.4	0.5	71	45	ND	ND	43	ND	ND	49	ND	ND	8.6	ND	ND	2.5	11	0.4	ND	1.0	1.1		ND	ND		240	ND	ND	ND	ND	ND
Dec											-		-																								



			Misce	llanec	us Ph	nysica	I Para	meters	;		Micro	orga	nisms		Hal	oaceti	c Aci	ds (H	AAs)		Tril	nalom	ethane	es (TH	Ms)					١	/olatile	e Orga	anic C	ompo	unds	(VOCs	5)				
	Hd	ALKALINITY	CONDUCTIVITY	TEMPERATURE	CHLORINE	TOTAL HARDNESS	TOTAL ORGANIC CARBON	TOTAL DISSOLVED SOLIDS	TOTAL SUSPENDED SOLIDS	TURBIDITY (Average)*	TOTAL COLIFORM (% positive)	E. COLI (% positive)	HETEROTROPHIC PLATE COUNT	DIBROMOACETIC ACID	DICHLOROACETIC ACID	MONOBROMOACETIC ACID	MONOCHLOROACETIC ACID	TRICHLOROACETIC ACID	TOTAL HALOACETIC ACIDS	BROMOCHLOROACETIC ACID	CHLOROFORM	BROMODICHLOROMETHANE	CHLORODIBROMOMETHANE	BROMOFORM	TOTAL TRIHALOMETHANES	BENZENE	BROMOBENZENE	BROMOCHLOROMETHANE	BROMOMETHANE	tert-BUTYLBENZENE	sec-BUTYLBENZENE	n-BUTYLBENZENE	CARBON TETRACHLORIDE	CHLOROBENZENE	CHLOROETHANE	CHLOROMETHANE	2-CHLOROTOLUENE	4-CHLOROTOLUENE	DIBROMOMETHANE	1,3-DICHLOROBENZENE	1,4-DICHLOROBENZENE
EPA MCL*																										5							5	100							75
Units		ppm	uS/cm	°F	ppm	ppm	ppm	ppm	ppm	NTU	%+	%+	CFU/mL	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
lan	Dale	1	a Wa	1	1	1	1	Finis	- 1			0.0	-4		<u> </u>			I	1	I	T 7.4	9.6	40	ND	20	l ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	LND	ND	L NID	ND.	ND	ND
Jan Feb	7.7	63 64		45 47	3.8	129 119		192 223		0.03		0.0	<1 <1	ND	7.6	ND	1.1	6.3	15	2.9	7.4 8.5	8.6 7.5	4.2 2.6	ND ND	20 19	ND ND	ND	ND ND	ND 	ND ND	ND ND	ND ND	ND ND		ND	ND ND	ND ND	ND ND	ND ND		ND
Mar	7.7	67	365	51	3.5			198		0.03		0.0	<1		7.0						25.3		1.1	ND	34	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		ND
Apr	7.7	64	315	62	3.4	106	 	166		0.04		0.0	<1								23.6	9.9	2.2	ND	36	ND	ND	ND	ND	ND	ND	ND	ND	1	ND	ND	ND	ND	ND		ND
May	7.7	62		66	3.7	-	 	166		0.04		0.0	<1	ND	11.6		2.6	11.7	26	2.7	18.6		1.5	ND	29	ND	ND	ND		ND	ND	ND	ND	1	ND	ND	ND	ND	ND		ND
Jun	7.7	85	1	77	3.6	136	1.8	219		0.04		0.0	<1									11.8		ND	42	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jul	7.7	91	406	82	3.7	152	2.2	278	ND	0.04	0.8	0.0	1								45.2	16.0	3.7	ND	65	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Aug	7.7	79	369	78	3.7	131	2.3	217	ND	0.04	0.0	0.0	1	ND	19.7	ND	2.0	20.8	43	4.8	24.6	14.0	4.3	ND	43	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Sep	7.7	95	429	74	3.8	148	2.0	268	4	0.04	0.0	0.0	2								30.6	14.1	3.1	ND	48	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Oct	7.7	111	472	68	3.8	171	2.2	289	ND	0.04	0.0	0.0	1								26.2	19.1	6.9	ND	53	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Nov	7.7	88	390	52	3.8	140	2.1	190	ND	0.04	0.0	0.0	<1	ND	10.4	ND	1.0	11.6	23	4.1	12.2	9.4	3.1	ND	25	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Dec	7.7	102	437	43	3.7	157	1.7	250	ND	0.03	0.0	0.0	<1	-							6.0	7.2	3.2	ND	16	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	McN	/lillan	Wate	er Tre	eatmo	ent P	lant l	Finisl	ned V	Vater																															
Jan	7.7	63	1	49	3.7	122	2.6	1		0.01		0.0	20								7.1	8.7	4.8	ND	21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Feb	7.7	56	1	50	3.7			213		0.01		0.0	6	1.0	7.4	ND	ND	5.6	14	3.7	7.9	8.4	3.9	ND	20	ND	ND	ND		ND	ND	ND	ND		ND	ND	ND	1	ND		ND
Mar	7.7	59	345	53	3.5	111	1.7	207	1	0.02	0.0	0.0	9								10.6	7.9	2.6	ND	21	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Apr	7.7	52	300	63	3.3	95	1.7	161	1	0.03	0.0	0.0	3								24.1	8.7	1.6	ND	34	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
May	7.7	52	283	66	3.8	96	1.8	162	1	0.03	0.0	0.0	1	ND	12.1	ND	2.2	13.5	28	2.6	24.5	8.7	1.5	ND	35	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Jun	7.7							200																														ND			
Jul								237																														ND			
Aug																																						ND			
Sep								256										-	_																			ND			
Oct								277													1												ND	-		ND	ND	ND	ND		ND
Nov													18																												
Dec	7.9				3.8					0.01	0.0	0.0																													

EPA MCL = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters Turbidity = Water turbidity after filters CFU/mL = Colony Forming Units per milliLiter ppm = Parts Per Million NTU = Nephelometric Turbidity Units

ND = Not Detected μS/cm = microSiemens per centimeter

ppb = Parts Per Billion

"---" = No Analysis Required



	_	ı																																											
																Vol	atile (Orgar	ic Co	mpoi	unds																		Охус	jenate	es & C	Other '	/OCs		
	1,2-DICHLOROBENZENE	DICHLORODIFLUOROMETHANE	1,1-DICHLOROETHANE	1,2-DICHLOROETHANE	trans-1,2-DICHLOROETHYLENE	cis-1,2-DICHLOROETHYLENE	1,1-DICHLOROETHYLENE	1,3-DICHLOROPROPANE	2,2-DICHLOROPROPANE	1,2-DICHLOROPROPANE	trans-1,3-DICHLOROPROPENE	cis-1,3-DICHLOROPROPENE	1,1-DICHLOROPROPENE	ETHYLBENZENE	HEXACHLOROBUTADIENE	ISOPROPYLBENZENE	4-ISOPROPYLTOLUENE	METHYLENE CHLORIDE	NAPHTHALENE	n-PROPYLBENZENE	STYRENE	1,1,1,2-TETRACHLOROETHANE	1,1,2,2-TETRACHLOROETHANE	TETRACHLOROETHYLENE	TOLUENE	1,2,3-TRICHLOROBENZENE	1,2,4-TRICHLOROBENZENE	1,1,1-TRICHLOROETHANE	1,1,2-TRICHLOROETHANE	TRICHLOROETHYLENE	TRICHLOROFLUOROMETHANE	1,2,3-TRICHLOROPROPANE	1,2,4-TRIMETHYLBENZENE	1,3,5-TRIMETHYLBENZENE	TOTAL XYLENES	VINYL CHLORIDE	2-BUTANONE (MEK)	4-METHYL-2-PENTANONE (MIBK)	DI-ISOPROPYL ETHER	METHYL TERT-BUTYL ETHER (MTBE)	TERT-AMYL ETHYL ETHER (TAME)	TERT-BUTYL ETHYL ETHER (TBEE)	BROMOETHANE	CARBON DISULFIDE	TRICHLOROTRIFLUOROETHANE
EPA MCL*	600			5	100	70	7			5				700				5			100			5	1000		70	200	5	5					10,000	2									
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
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	ACENAPHTHENE	ACENAPHTHYLENE	ACETOCHLOR	ACIFLOURFEN	ALACHLOR	ALDICARB	ALDICARB SULFONE	ALDICARB SULFOXIDE	ALDRIN	ANTHRACENE	AROCHLOR 1016 (PCBs)	AROCHLOR 1221 (PCBs)	AROCHLOR 1232 (PCBs)	AROCHLOR 1242 (PCBs)	AROCHLOR 1248 (PCBs)	AROCHLOR 1254 (PCBs)	AROCHLOR 1260 (PCBs)	TOTAL PCBs	ATRAZINE	BAYGON	BENTAZON	BENZ(a)ANTHRACENE	BENZO(b)FLUORANTHENE	BENZO(g,h,l)PERYLENE	BENZO(a)PYRENE	BENZO(K)FLUORATHENE	alpha-BHC	beta-BHC	delta-BHC	BROMACIL	BUTACHLOR	BUTYLBENZYLPHTHALATE	CAFFEINE	CARBARYL	CARBOFURAN	alpha-CHLORDANE	gamma-CHLORDANE	CHLORDANE	CHLORPYRIFOS (DURSBAN)	CHLOROBENZILATE	CHLORONEB	CHLOROTHALONIL	CHRYSENE	2,4-D	DALAPON
EPA MCL*					2													0.5	3						0.2										40			2						70	200
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
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	2,4-DB	DCPA MONO & DIACID DEGRADATE	2,4'-DDD	2,4'-DDE	2,4'-DDT	4,4'-DDD	4,4'-DDE	4,4'-DDT	DIBENZ(a,h)ANTHRACENE	DICAMBA	3,5-DICHLOROBENZOIC ACID	DICHLORPROP	DICHLORVOS (DDVP)	DIELDRIN	DIETHYLPHTHALATE	di-(2-ETHYLHEXYL)ADIPATE	di-(2-ETHYLHEXYL)PHTHALATE	DIMETHOATE	DIMETHYLPHTHALATE	DI-N-BUTYLPHTHALATE	DI-N-OCTYLPHTHALATE	2,4-DINITROTOLUENE	2,6-DINITROTOLUENE	DINOSEB	DIQUAT	ENDOTHALL	ENDRIN	ENDRIN ALDEHYDE	EPTC	FLUORANTHENE	FLUORENE	GLYPHOSATE	HEPTACHLOR	HEPTACHLOR EPOXIDE	HEXACHLOROBENZENE	HEXACHLOROCYCLOPENTADIENE	3-HYDROXYCARBOFURAN	INDENO(1,2,3,c,d)PYRENE	ISOPHORONE	LINDANE	ENDOSULFAN I (alpha)	ENDOSULFAN II (beta)	ENDOSULFAN SULFATE	MALATHION	METHIOCARB	METHOMYL	METHOXYCHLOR
EPA MCL*																400	6							7	20	100	2					700	0.4	0.2	1	50				0.2							40
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
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Jan Feb Mar

May Jun

Aug Sep Oct Nov Dec

WASHINGTON AQUEDUCT, US ARMY CORPS OF ENGINEERS **ANNUAL REPORT OF WATER ANALYSIS (2017)**

									S	ntheti	c Orga	nic Co	mpour	nds									ı	Miscell	aneou	S			Nitros	amines	3			Rad	lionucl	ides	
	METOLACHLOR	METRIBUZIN	MOLINATE	trans-NONACHLOR	OXAMYL	PARAQUAT	PARATHION	PENDIMETHALIN	PERMETHRIN	PENTACHLOROPHENOL	PHENANTHRENE	PICLORAM	PROPACHLOR	PYRENE	SIMAZINE	TERBACIL	TERBUTHYLAZINE	THIOBENCARB	TRIFLURALIN	TOXAPHENE	2,4,5-T	2,4,5-TP (SILVEX)	DIBROMOCHLOROPROPANE (DBCP)	ETHELYNE DIBROMIDE (EDB)	CYANIDE	2,3,7,8-TCDD (DIOXIN)	N-NITROSODIMETHYLAMINE (NDMA)	N-NITROSO-n-PROPYLAMINE (NDPA)	N-NITROSODIBUTYLAMINE (NDBA)	N-NITROSODIETHYLAMINE (NDEA)	N-NITROSOMETHYLETHYLAMINE (NMEA)	N-NITROSOPYROLIDINE (NPYR)	GROSS ALPHA PARTICLE ACTIVITY	GROSS BETA PARTICLE ACTIVITY	RADIUM-226 & RADIUM-228	STRONTIUM-90	TRITIUM
EPA MCL*					200					1		500			4					3		50	200	50	0.2	30							15	50**	5		
Units	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppt	ppt	ppm	ppq	ppt	ppt	ppt	ppt	ppt	ppt	pCi/L	pCi/L	pCi/L	pCi/L	pCi/L

Dalecarlia Water Treatment Plant Finished Water

Duice	Jui iiu	TTALE		tilloll	t i iuii		Jiica	TTUIC																												
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McMillan Water Treatment Plant Finished Water

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Sep						ND																					ND	ND	ND	ND	ND	ND					
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Dec	ND	ND	ND	ND			ND	ND	ND	ND	ND		ND	ND	ND	ND	ND	ND	ND																		

EPA MCL* = Environmental Protection Agency's Maximum Contaminant Level for regulated parameters

** The MCL for beta and photon emitters is 4 mrem/year and EPA considers 50 pCi/L to be the level of concern for beta/photon emitters.

ppm = Parts Per Million (mg/L) ppb = Parts Per Billion (μ g/L) ppt = Parts Per Trillion (η g/L) pCi/L = Picocuries Per Liter ND = Not Detected

"---" = No Analysis Required

ppq = Parts Per Quadrillion (pg/L)